

1. INTRODUCTION

This air quality permit application is submitted by the Solvay Soda Ash Joint Venture (SSAJV) for a Permit to Construct and a Prevention of Significant Deterioration (PSD) Permit. Construction and modifications to the SSAJV's Green River facility will allow the processing of an additional 1.2 million tons per year (MM TPY) of soda ash. This facility is located near Green River, Wyoming, and has been operating since 1982. This application is being submitted to the Wyoming Department of Environmental Quality, Air Quality Division (WDEQ/AQD), to meet requirements of the Wyoming Air Quality Standards and Regulations (WAQS&R).

The new and modified facilities will be constructed at the existing Green River facility. These modifications are anticipated to result in significant increases in the following criteria pollutants: particulate emissions (assumed to be less than ten microns in diameter, PM_{10}), nitrogen oxides (NO_x), carbon monoxide (CO) and volatile organic compounds (VOCs). The VOC emissions contain some species which are listed under Title III of the Clean Air Act Amendments (CAAA) as Hazardous Air Pollutants (HAPs). PSD permitting requirements and review are triggered for PM_{10} , CO, and VOC emissions. Due to recent projects resulting in a reduction of NO_x emissions, the increase in NO_x emissions resulting from this project will be offset. Emissions of all other criteria pollutants are below the de minimis emission levels and are not subject to PSD review. Top-Down Best Available Control Technology (BACT) has been addressed for all pollutants, as well as ambient impacts due to emissions from the entire facility.

This report and attached cover letter serve as support documentation in the actual permit application to assess the potential air quality impacts of the Solvay Soda Ash Joint Venture facility with the proposed soda ash expansion.